This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

HE
GAN

614.173
R6

American Life-Waste

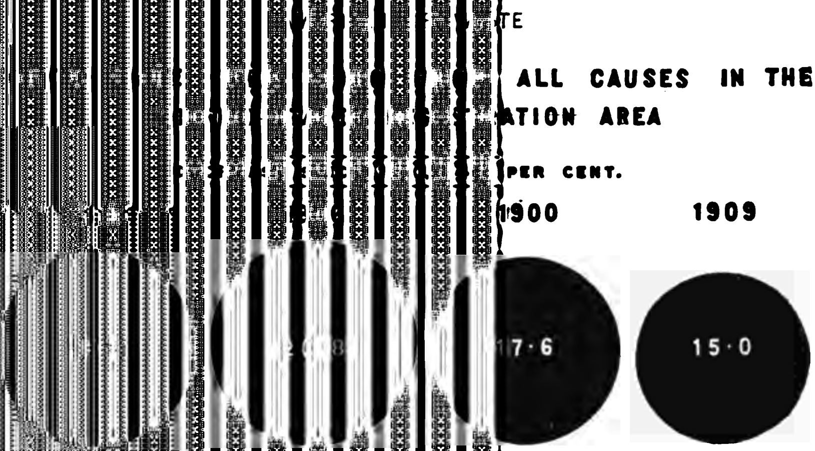
Where and How It is Increasing

Herein are briefly presented some concrete results of the work of scientific men and others who have compiled, studied and digested the mortality statistics.

These results with charts and comments are offered here in the hope that they may assist in the general warfare against needless suffering and loss of life from preventable disease.

BY
E. E. RITTENHOUSE
FORMER COMMISSIONER OF INSURANCE OF THE STATE OF COLORADO
AND
EUGENE L. FISK, M.D.
FELLOW OF THE NEW YORK ACADEMY OF MEDICINE AND MEDICAL DIRECTOR
OF THE
POSTAL LIFE INSURANCE COMPANY

1911



[illegible] RATE.

[illegible] tics show that the general [illegible] s registration area has [illegible] ousand of population to [illegible] rose in 1890 to 20.8.

[illegible] been received with joy, [illegible] n by the press of the [illegible] ortality is exceedingly [illegible] t be over-estimated. It [illegible] h rate is still excessive. [illegible] by the application of [illegible] vident, but any further [illegible] mortality can only be [illegible] ous and systematic pop- [illegible] ease that will be as per- [illegible] society's fight against [illegible]

[illegible] LINE.

[illegible] shows that the decline [illegible] in the diseases of chil- [illegible] es almost wholly from [illegible] d other diseases of the [illegible]

[illegible] t the science of disease [illegible] public upon this subject [illegible] contagious and infec- [illegible] from cancer, kidney,

© 267131 A

DEATH RATE PER 1000 ABOVE AGE 40 AND BELOW AGE 40 IN REGISTRATION STATES

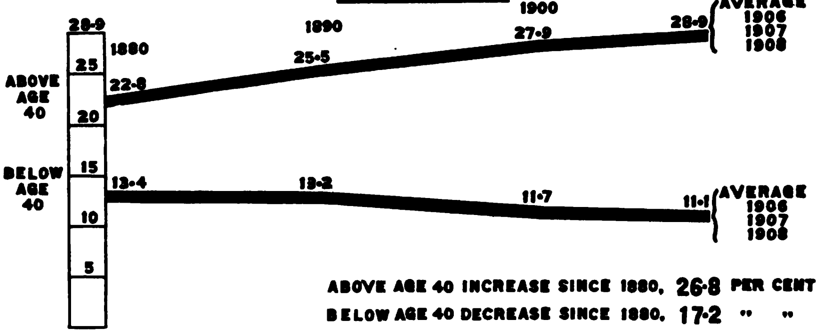


CHART No. 2

heart, and similar non-communicable diseases, against which no warfare has been waged, is not only very high but in most instances has shown a remarkable increase.

GENERAL MORTALITY TREND

The fallibility of our most reliable vital statistics is fully appreciated. Mathematical exactness in such statistics is, of course, impossible; but, allowing for all possible inaccuracies in the registration area reports, there is no denying the general trend of mortality from the various diseases as shown by them. Vital statistics collected by states, and by very widely separated cities, and even by ordinary census enumerators, all give the same testimony corroborating the upward or downward trend of the death rate from the diseases discussed herein.

THE VITAL PROBLEM.

Our success in combating contagious disease has prolonged the lives of many thousands of people.

Why should not this magnificent work be pushed with increased vigor, and extended to the great number of our people who are threatened with premature death from *all* preventable diseases? If it is a good thing to save some, is it not a still better thing to save more, or all that it is possible to save?

What is the extent of this life-waste?

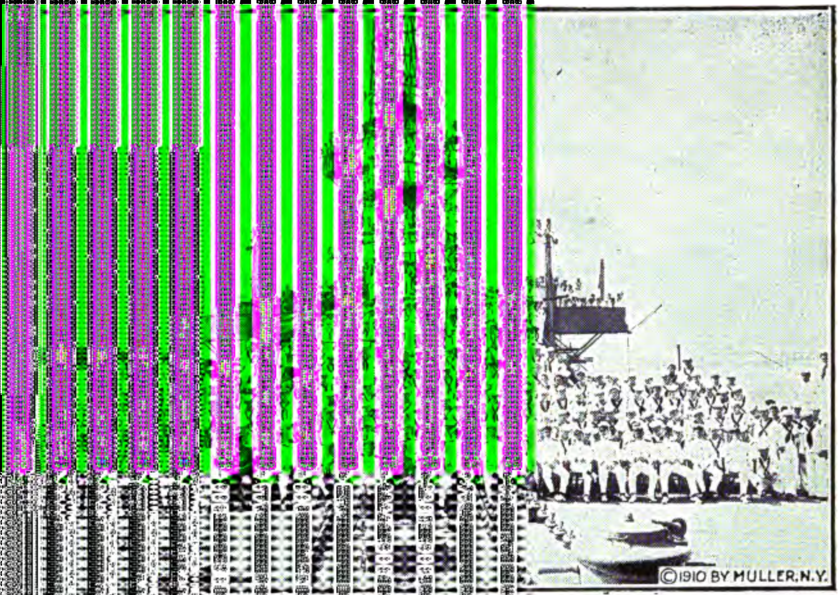
Where is it increasing and where decreasing?

What is being done to reduce it?

What can be done to further reduce it?

These are problems of vast magnitude and of vital import to our race, demanding immediate and intelligent attention.

260257



©1910 BY MULLER, N.Y.

[illegible] MY.

[illegible] battleship and crew staggered [illegible] war with Spain.

[illegible]—our perpetual enemies [illegible]

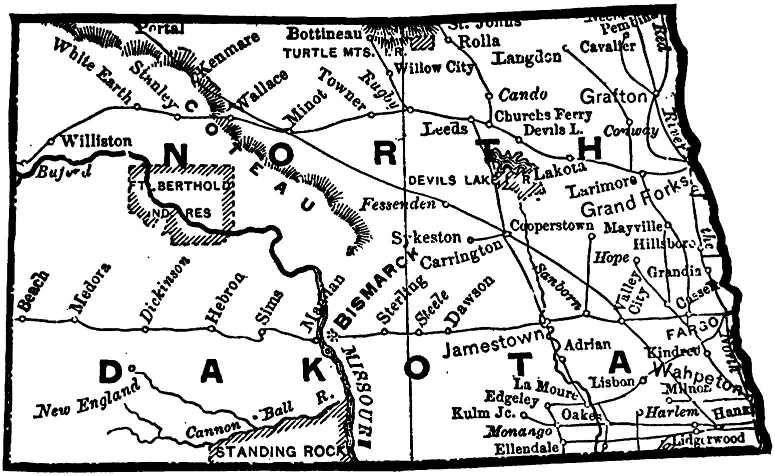
[illegible] equalling the crews [illegible]

[illegible] American lives exceeding [illegible] Army and Navy of the [illegible]

[illegible] lives exceeding the [illegible] since the Declaration of [illegible]

[illegible] vast army of Ameri[illegible] nor precipitates a war [illegible]

[illegible] PREVENTING YELLOW [illegible] LIVES THAN WE LOST IN [illegible] Gen. [illegible] Wood.



THE CALL OF COMMON HUMANITY.

The announcement that during the coming year the entire population of North Dakota were to die of yellow fever, or other avoidable disease, would shock the civilized world, and touch the hearts and purses of millions of generous and sympathetic people, and the imperative duty of saving the people of the threatened state would be promptly performed.

And yet, scattered throughout our country, human lives equalling the population of that state are annually sacrificed through ignorance and neglect of reasonable and known preventive measures. Is this loss any less a calamity because these lives are distributed throughout the nation?

Is it always going to require a sudden disaster or an epidemic to even temporarily arouse our people to the duty of protecting human life from avoidable death?

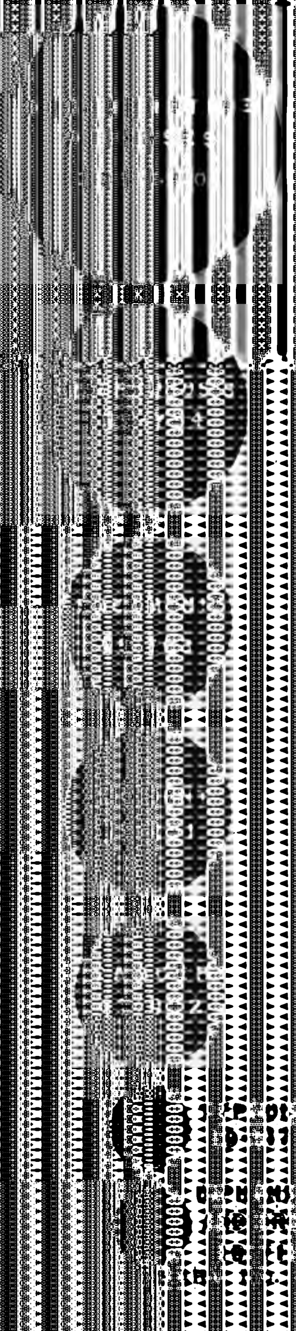
"THE SCIENCE OF DISEASE PREVENTION, IF PROPERLY APPLIED, CAN ADD FIFTEEN YEARS TO THE PRESENT AVERAGE LENGTH OF HUMAN LIFE." (Present average length of life about 45.) —Prof. Irving Fisher, Yale.

STE

THE UNITED STATES

IED CAUSES.

ON RECORDS



THE POPULATION OF

APOLIS IND.

THE POPULATION OF

TERSON N. J.

THE POPULATION OF .

MINGTON DEL.

THE POPULATION OF

KERS N. Y.

THE POPULATION OF

EORIA ILL.

THE POPULATION OF

MIRA N. Y.

ESTIMATED LIVES LOST IN THE PAST TEN YEARS AND THE PROBABLE LOSS IN THE NEXT TEN YEARS IN THE UNITED STATES, FROM SPECIFIED CAUSES

BASED UPON REGISTRATION RECORDS

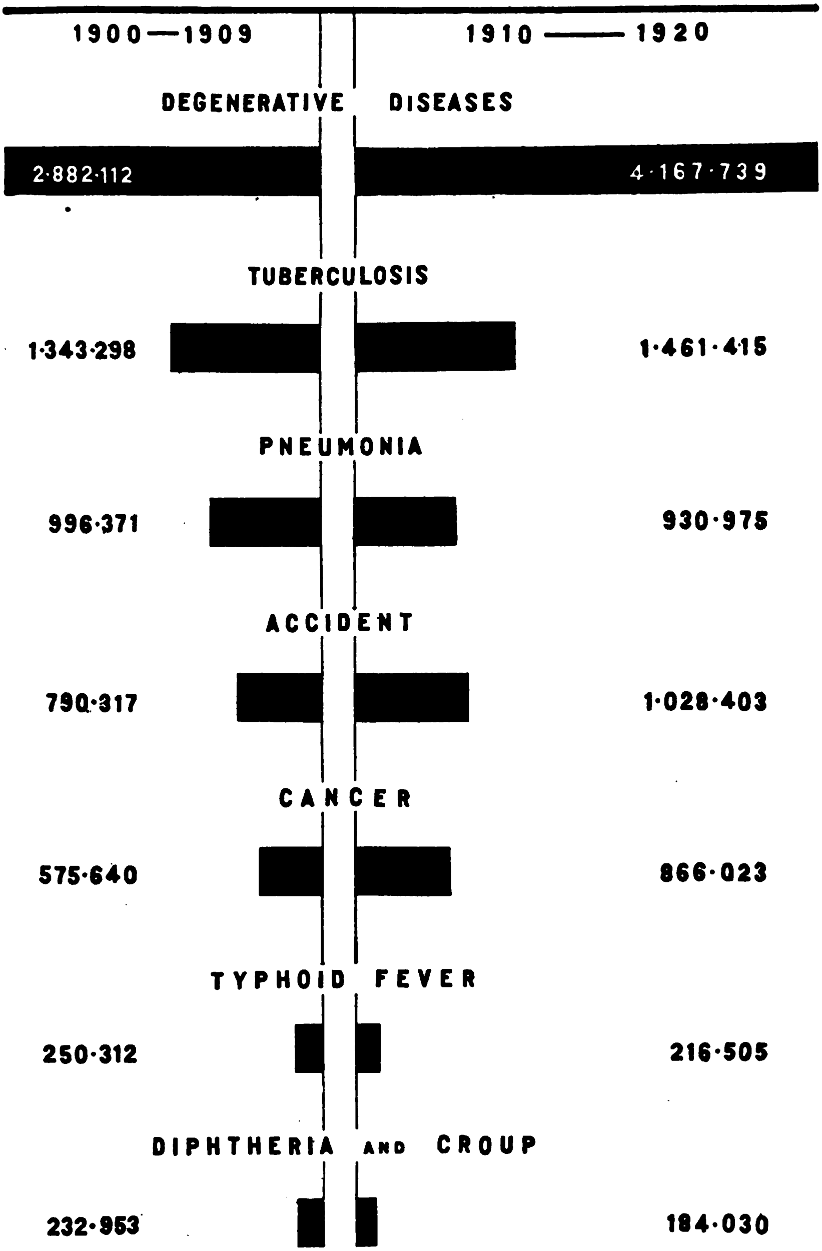


CHART No. 4

SOME IMPORTANT CAUSES OF LIFE-WASTE.

Enough has already been said to give the reader a general idea of the appalling magnitude of American Life-Waste, past, present and prospective, and of the importance of the problem of prolonging the lives of the millions who are threatened with needless suffering and premature death.

Let us now briefly look into the important contributors to the Life-Waste referred to on the previous page:

How many people know—

That there has been an extraordinary increase in the mortality from cancer?

That pneumonia, a communicable disease, is almost as great a scourge as it was thirty years ago?

That the mortality from kidney and other diseases common to middle life and old age has been increasing for years?

That these diseases are either wholly or partially preventable?

That while the death rate per thousand among children and in early adult life has been going down, it has been advancing in middle life and old age?

The following brief discussion of these diseases and the story the mortality statistics tell of them, is by Dr. Eugene L. Fisk, who is a careful student of these questions.

THE DEATH RATE AT VARIOUS AGES.

Chart No. 5, on the opposite page, showing the trend of mortality in the various age groups, should be used as a touch-stone in interpreting the charts and comments which follow it. In other words, this chart reflects the changes in the death rate from various maladies that prevail at particular periods of life.*

---

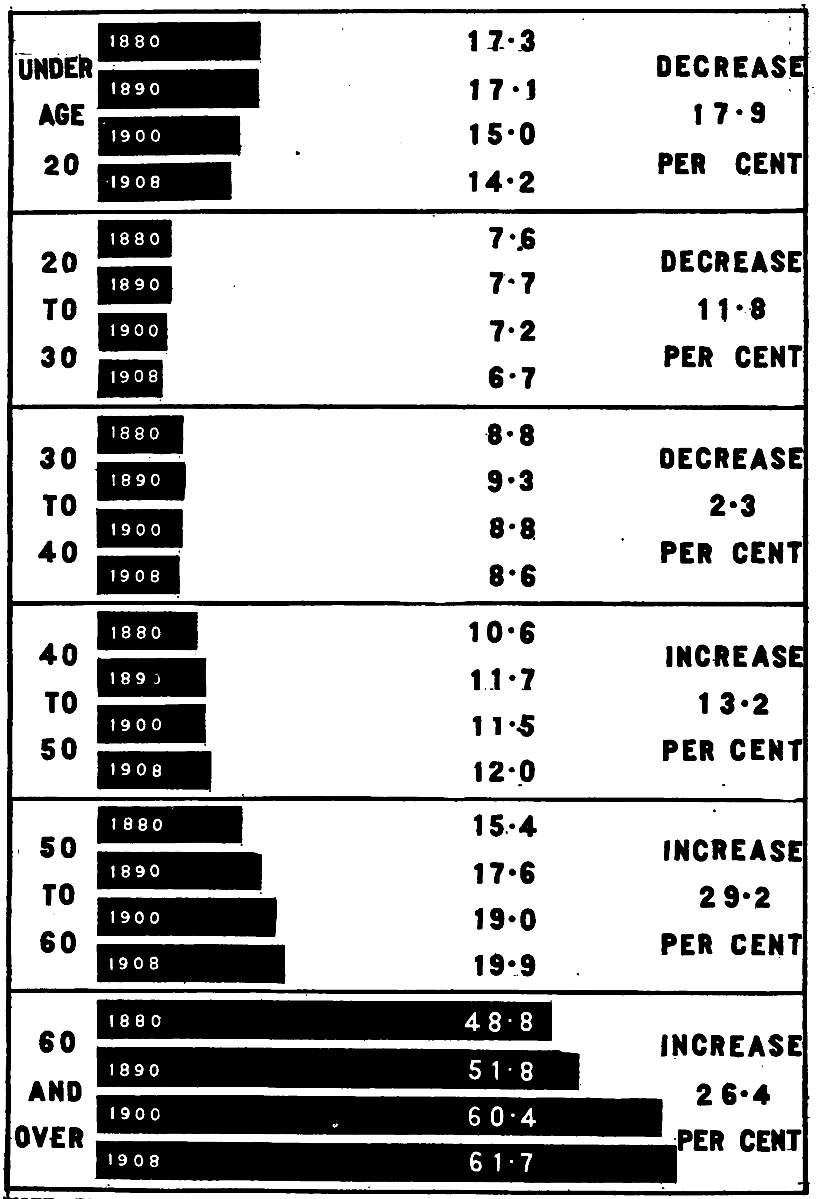
*Charts marked "Registration Area" are, for 1880, based upon the registration figures of Massachusetts and New Jersey—the only states in the United States Registration Area at that period. For subsequent periods the figures for the full registration area are shown. In 1908 the United States Registration Area included 51.8% of the population.

Charts marked "Registration States" are based mainly upon the figures of seventeen states now included in the United States Registration Area, the research having been carried back through registration records and census records to 1880. In some instances the figures for only nine states could be had in available form for 1880.

Notwithstanding the difficulties inherent in such a research, especially in estimating the age population, as was necessary for the years 1906, 1907 and 1908, the downward sweep of the communicable diseases, and the upward sweep of the degenerative maladies, with their natural and inevitable effect on the mortality in certain age groups, is clearly demonstrated.

GENERAL DEATH RATE PER 1,000 IN REGISTRATION STATES

BY AGE PERIODS



NOTE:—THE RATE FOR 1908 IS THE AVERAGE OF 1906, 1907 AND 1908

CHART No. 5

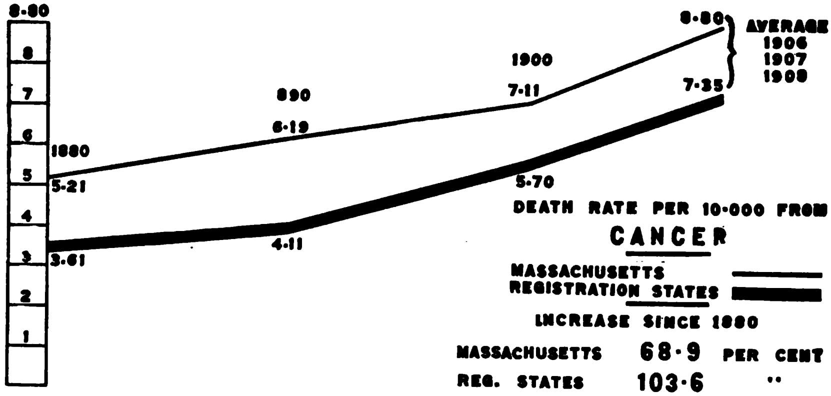


CHART No. 6

CANCER

Chart No. 6 shows that since 1880 the death rate from cancer in 17 states now included in the United States registration area, has risen from 3.6 to 7.4 per 10,000—an increase of 104%. Although the earlier figures are derived from the United States census records, they must fairly reflect the actual trend of mortality, as they so closely parallel the rates derived from the accurate registration records of Massachusetts, which are exhibited in the same chart. Correlating these figures with other statistical evidence, notably the marked increase in mortality at advanced ages shown in chart No. 5, and the abundant medical evidence furnished by hospitals, surgeons, and those who are daily concerned with this disease, a truly alarming increase in the mortality from cancer must be conceded.

Various efforts have been made by eminent authorities, notably King and Newsholme, to show that the steady increase in the death rate from cancer which has been observed in all civilized countries, is apparent only, and chiefly due to improved diagnosis and the more accurate reporting of statistics. The fact that in some sections external cancer has shown a slight decrease, while internal cancer contributes the bulk of the increase, is the strongest argument employed to support such views.

It has also been postulated that there are more people at the cancer ages living in the population than formerly.

Those who still hold such views must explain why, in this country, the death rate from external cancer shows a decided increase, 31% in the past eight years, notwithstanding the benefits derived from early diagnosis and the increasing proportion of cures by modern surgical methods.

As cancer is a slow and wasting disease, which has been known since remote antiquity, stamping its malignant character on the very aspect of its victim in the latter stages of the disease, it would seem that the possible influence of improved diagnosis in increasing the number of cancer deaths *reported* in the past thirty years has been greatly exaggerated.

As to changes in the age distribution of the population, judging by Massachusetts, where accurate registration records are kept, no change of sufficient importance to greatly affect the cancer death rate has taken place, and the evidence from the United States registration area is of like character.

But aside from such evidence it must be clearly apparent that if we attempt to account for an increase of 104% in the death rate from cancer upon the hypothesis of an increased proportion of individuals composing the older age groups, we must assume an enormous and obviously impossible change in the age constitution of the population.

But why is this malignant disease increasing at a rate which, if unchecked, will soon cause it to outstrip tuberculosis as a veritable scourge?

Is not the high mortality from cancer chiefly a reflection of the conditions responsible for the increasing life-waste from other degenerative diseases of middle life and old age?

Surely if the specific cause of cancer, as yet undetermined, is not more prevalent, then the social and business conditions which environ us must have operated to lower the resistance to this disease. Whether cancer is due to a germ, as some still believe, or to a special form of tissue cell, which becomes "lawless," and takes on a riotous growth as the result of chemical or mechanical irritation, there is no reason to conclude that such elements are more prevalent or powerful than they were centuries ago.

Both medical and statistical evidence of the strongest character forces the belief that a lowered bodily resistance which invites pneumonia, apoplexy, kidney disease, heart disease, etc., accounts for the facility with which cancer invades and conquers the modern human organism.

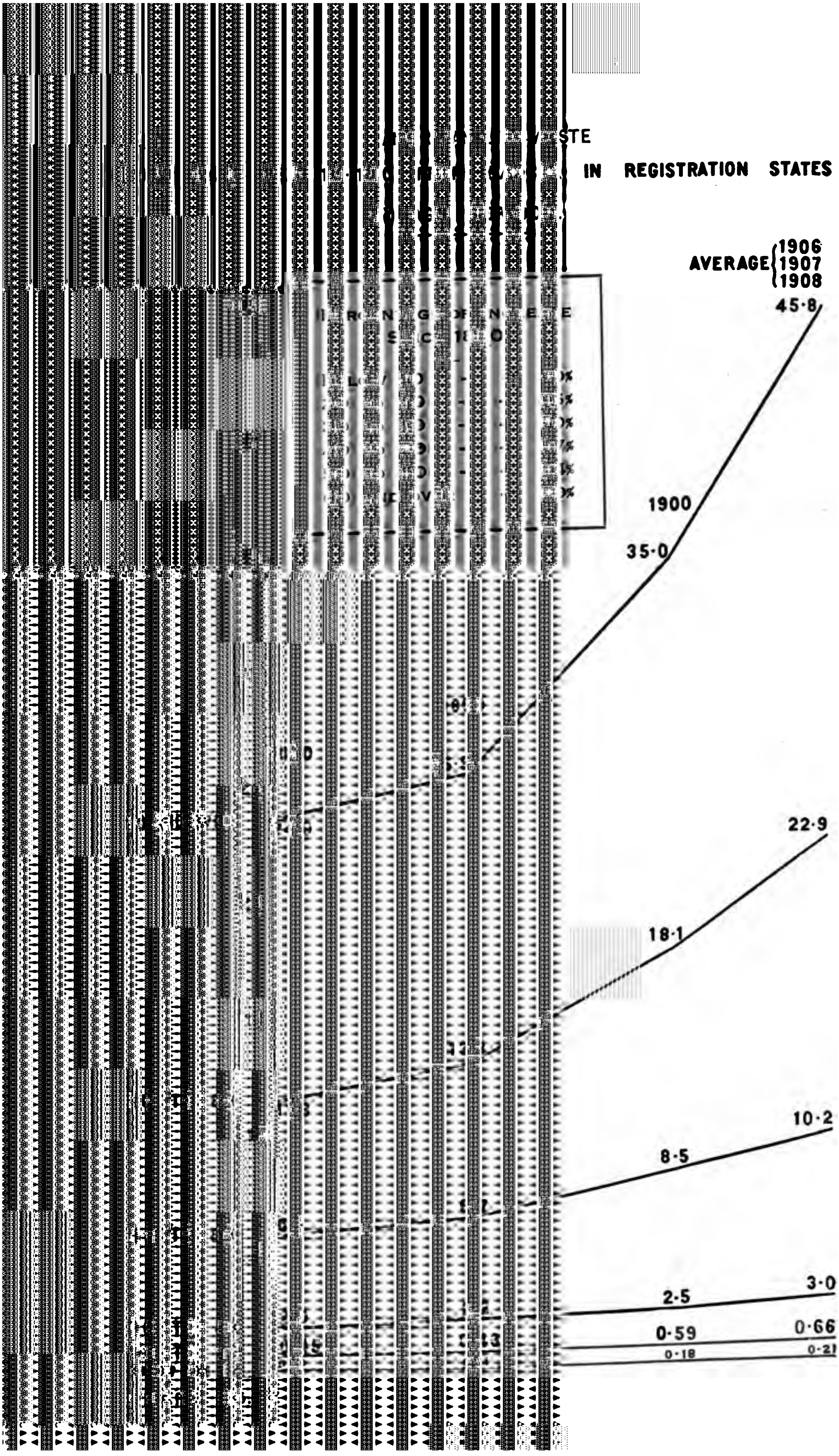

STE
IN REGISTRATION STATES
AVERAGE {1906 1907 1908
45·8
1900
35·0
22·9
18·1
10·2
8·5
3·0
2·5
0·59
0·66
0·18
0·21

Chart No. 7, showing that the death rate from cancer between the ages 40 and 50 has risen from 6.1 to 10.2 per 10,000, an increase of 67%, would indicate that the increase in the general death rate from cancer is not due to a larger proportion of elderly lives. While an increasing number of lives saved from the communicable diseases of early life is undoubtedly contributing to the cancer death rate, the high mortality at the advanced ages, as shown in chart No. 5, is probably keeping down the proportion of elderly lives in the general population. The stress of our rapid and complex existence, together with excesses or errors in eating and drinking, are the largest factors in breaking down the resistance to cancer and other affections peculiar to middle life and old age.

What can be done to prevent, as well as cure, this distressing and malignant malady?

Cancer is listed in the Report on National Vitality as non-preventable, with the qualification that medical science may yet discover a specific remedy. As a matter of fact, cancer is preventable in a large degree, especially if we accept the hypothesis that its high mortality rate is due to faulty life habits. The removal in early life of warts, moles, and all such excrescences, especially those showing a tendency to growth, would materially lessen the liability to cancer.

Prolonged mechanical irritation of the tissues, especially of the skin or mucous membrane, as in excessive pipe-smoking, should also be avoided. Early surgical or special consultation for obscure or obstinate diseases of the stomach and intestines, would give many a cancer victim a fair chance for life.

Probably in 50% of all cases the disease could be prevented by reasonable hygienic precautions, and the cultivation of life habits which tend to neutralize the strain of modern existence and build up a resistance to degenerative diseases in general.

No specific "cure" for cancer has yet been found. Radium, the X-Ray, and other remedies are of some service in superficial cancer, but it is safe to say that operation in the very earliest stage of the disease would save over 90% of all cases.

The effect of heredity is exaggerated in the public mind. Some families show a lack of resistance to all degenerative troubles, but there is no proof that cancer is directly transmitted.

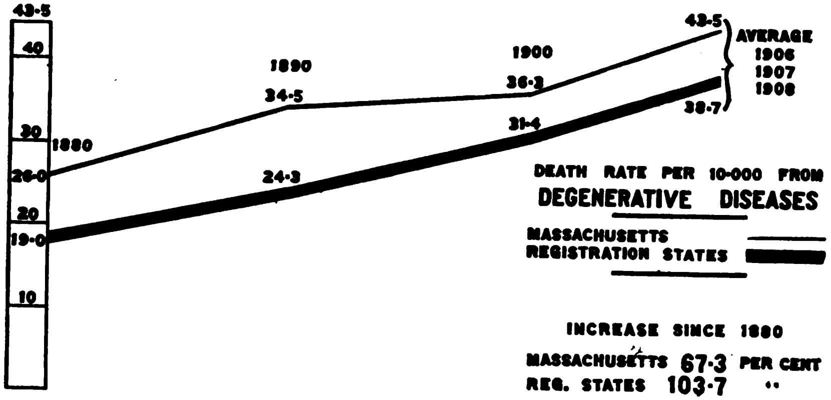


CHART NO. 8

DEGENERATIVE DISEASES

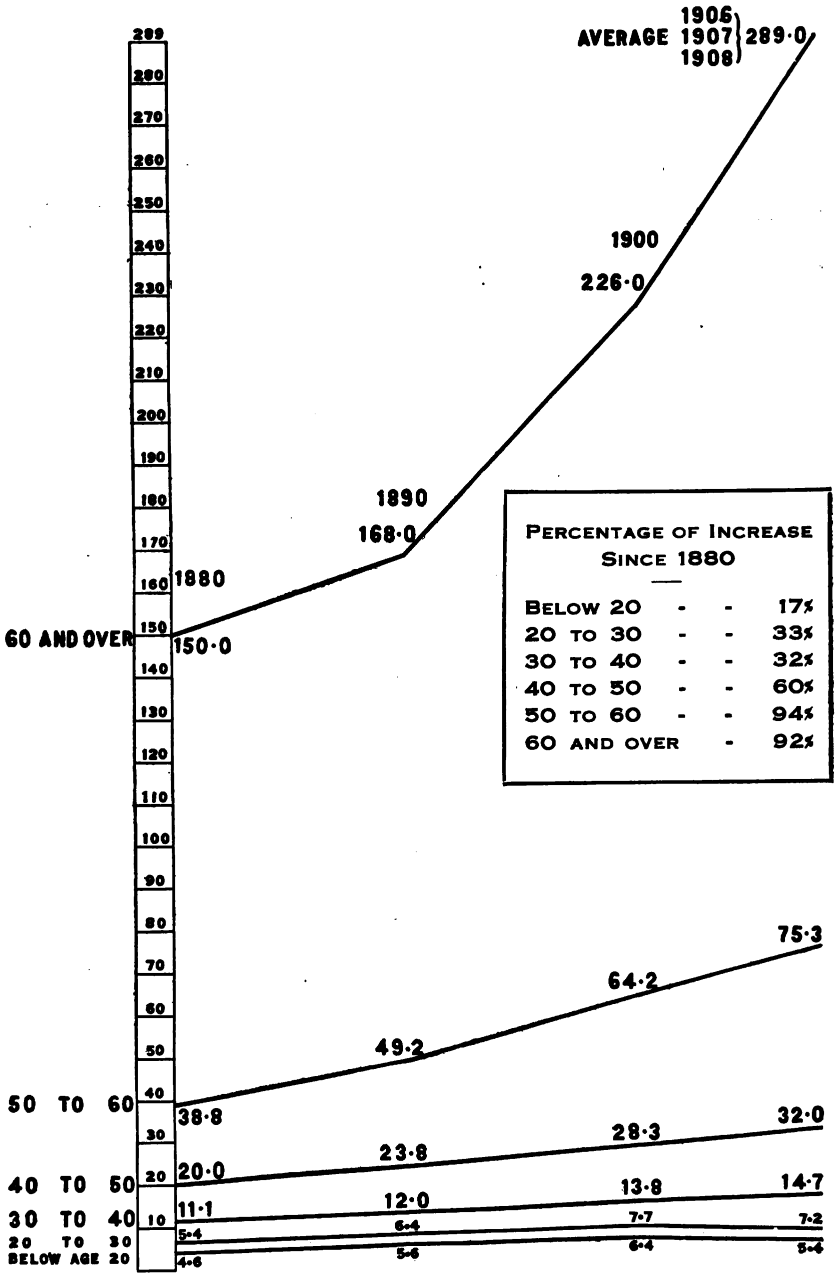
Chart No. 8 shows a truly remarkable increase in the mortality from degenerative diseases—i. e., affections of the heart, blood vessels and kidneys, "dropsy," etc.—104% since 1880. No matter where statistics relating to these diseases are sought, the same decided upward trend is found. The figures for all the degenerative affections have been combined in the above chart, in order that any possible misinterpretation, due to the more exact reporting of some particular form of disease, should be avoided. It must be apparent that, while improved diagnosis or greater accuracy in reporting might be responsible for a marked increase in heart disease, or kidney disease, nevertheless, even in the state of knowledge that obtained thirty years ago a death from any one of these degenerative affections would have been reported under one of the subdivisions covered by the chart. In other words, while changes in the manner of reporting might alter the mortality figures *within* this group, the total mortality rate, as shown in the chart, could not be affected by such influences.

Furthermore, these statistical results simply confirm a belief that has been growing among the most experienced physicians, who have observed an increasing number of such cases in their private and hospital practice.

Even if no increase could be shown, surely we would be justified in regarding a failure to reduce the mortality from these maladies as a reproach upon our civilization.

DEATH RATE PER 10·000 FROM DEGENERATIVE DISEASES IN REGISTRATION STATES

BY AGE PERIODS



PERCENTAGE OF INCREASE SINCE 1880

BELOW 20	- -	17%
20 TO 30	- -	33%
30 TO 40	- -	32%
40 TO 50	- -	60%
50 TO 60	- -	94%
60 AND OVER	-	92%

CHART No. 9

Chart No. 9, showing a very heavy increase in the mortality from degenerative diseases during the most productive years of life, amounting to 60% between ages 40 and 50, is another illustration of the degree of life-strain that affects our people. It should be noted that the increase does not fall solely among the aged, but reflects a deplorable and unnecessary loss among those in the prime of life.

What may be done to check this regrettable mortality during the most valuable and effective years of life?

A complete answer would cover the whole ground of preventive medicine. In a general way it may be stated that this increasing mortality, which to a large degree offsets the salvage that has been effected at younger ages, is an indication of a temporary failure of adjustment to our rapidly developing civilization.

The degree of preventability or postponability of these diseases estimated in Professor Irving Fisher's report on National Vitality, varies between 25 and 50%. It is safe to say that the application of reasonable precautions, well-known to medical science, would reduce the mortality from these degenerative affections at least 50%.

As to the methods of prevention, it is apparent that the business, social, and domestic conditions which make such heavy demands upon brain, nerve and artery, must be corrected, or a greater degree of bodily resistance must be built up in order to offset such influences. Just as in business life we draw largely upon modern invention and the resources of science to increase efficiency and reduce waste, so must we avail ourselves of such knowledge as science now affords us in the care of our bodies and in the systematizing of our lives, to the end that economy of bodily resources shall be considered just as important as the conservation of natural resources and political institutions.

Probably the most valuable protective measure will be found in periodical medical examinations, whereby the earliest symptoms of degenerative tendencies. may be detected, and the proper correction in life habits adopted. In a general way, the best safeguards are: **TEMPERANCE IN ALL THINGS MENTAL POISE, PATIENCE, COURAGE, AND THE AVOIDANCE OF HYSTERICAL UNREST AND NEEDLESS OVERSTRAIN IN MEETING THE COMPLEXITIES AND PROBLEMS OF EXISTENCE.**

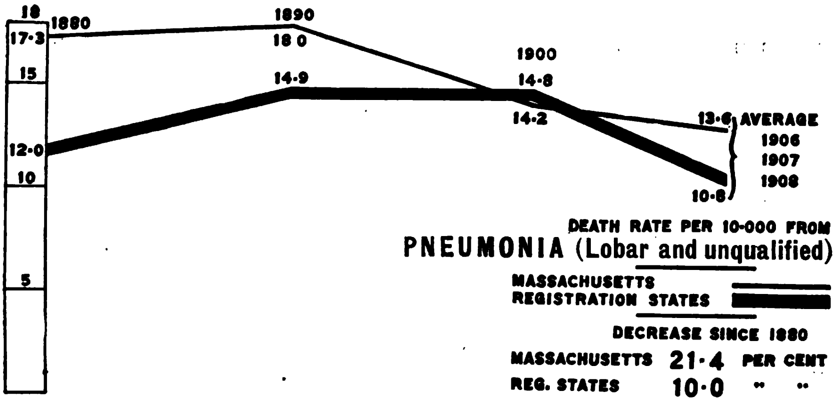


CHART NO. 10

PNEUMONIA

Notwithstanding the progress in hygiene, and the lowered mortality from other communicable diseases, pneumonia still contributes an enormous proportion of the general death rate. The death rate from pneumonia fluctuates widely, owing to the varying severity of epidemics, but the average rate for recent years in the registration area shows little improvement over that of thirty years ago, and in some cities there has been a decided increase.

Our failure to attain greater success in dealing with pneumonia, notwithstanding the improved methods of medical treatment, is probably due to that same lowered resistance in the population which is responsible for the high and increasing mortality from the degenerative affections. Pneumonia is frequently the terminal cause of death in diseases of the heart, arteries and kidneys.

It is the opinion of experienced physicians that pneumonia, in a previously healthy subject, is a comparatively mild disease, but that those whose constitutions are impaired by chronic disease or excesses of any kind, especially those of intemperate habits, are easy victims of the pneumonia germ.

As in the case of cancer, the same general measures that protect against the degenerative affections will fortify the system against pneumonia. In addition to these, hygiene of the nose and throat, and prompt medical attention to acute colds, will often prevent the development of this disease. Vaccination by a preparation of dead pneumonia bacilli is now practiced with some success, but it must be used in the very earliest stages of the attack in order to prove effective. That 45% of the death rate from pneumonia is unnecessary seems a conservative estimate.

RATIO OF DEATHS FROM PNEUMONIA IN CERTAIN AGE GROUPS

TO TOTAL DEATHS FROM PNEUMONIA AT ALL AGES

UNITED STATES REGISTRATION AREA 1909.

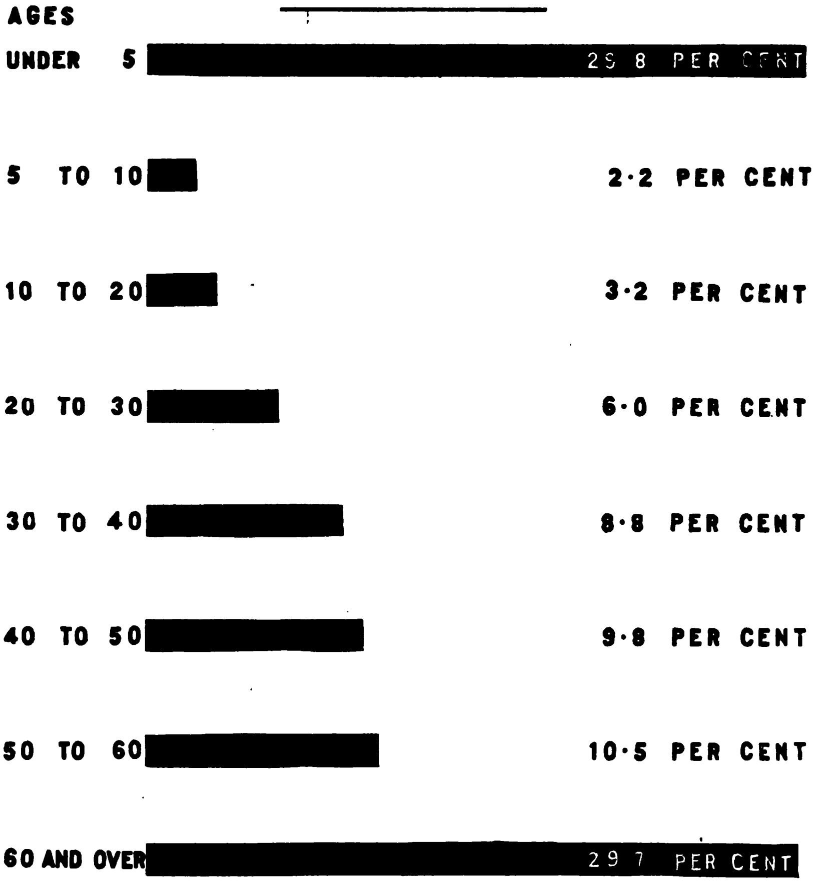


CHART NO. 11

Although there is a very heavy mortality from pneumonia in early infancy, owing to the feeble resisting power at that age, chart No. 11 shows that fully 50% of the deaths occur after 40 years of age, when the disease is most likely to be complicated by maladies of the degenerative class.

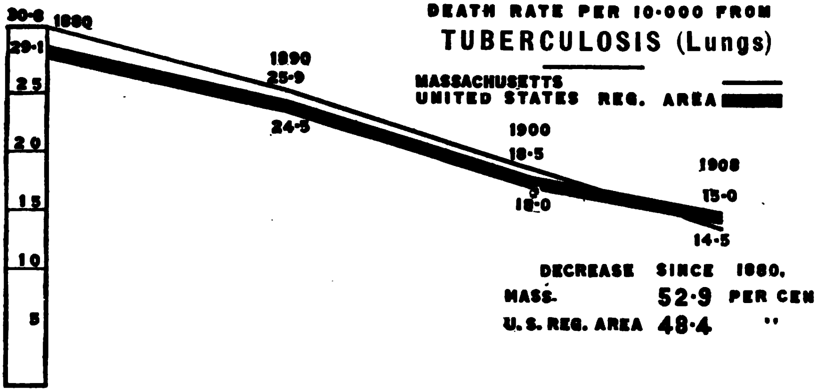


CHART No. 12

TUBERCULOSIS

Chart No. 12, showing a reduction of 48% in the death rate from consumption since 1880, reveals what has been accomplished by vigorous efforts on the part of physicians and laymen in the eradication of an unnecessary malady. We are aware that some people question whether the death rate from this disease has been reduced to any considerable extent. But is it reasonable to suppose that the splendid and vigorous fight that has been waged against this terrible malady by anti-tubercular organizations, physicians, and public-spirited citizens generally, has resulted in merely a drawn battle?

Such contention implies that the increasing utilization of fresh air and proper living habits in the prevention and cure of this disease have been without material effect on the death rate and seems illogical in the extreme. In fact, the lessened mortality from this disease which physicians have noted in their private and hospital practice, would suggest the probability of statistical evidence such as shown in the above chart. But much still remains to be accomplished.

The Report on National Vitality lists consumption as preventable to the extent of 75%. Inasmuch as consumption is a communicable disease, due to a bacillus, ideal methods of prevention should practically stamp out and eradicate this malady. However, basing our estimates on the assumption that only reasonable precautions can be expected, 75% seems a conservative estimate of the unnecessary loss of life from this disease.

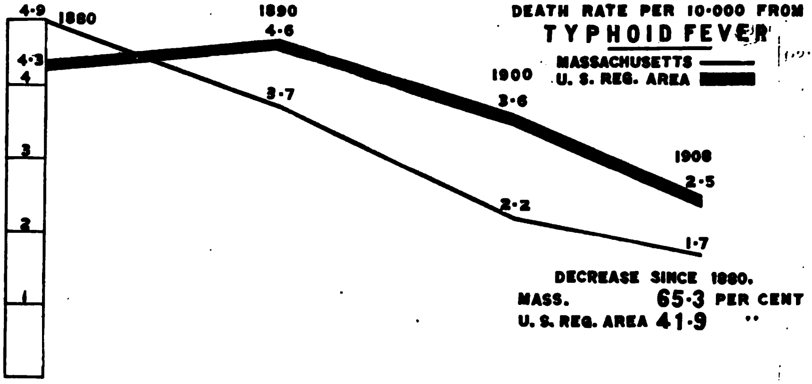


CHART No. 13

TYPHOID FEVER

Chart No. 13, showing a reduction since 1880 of41.9% in the death rate from typhoid fever, is convincing evidence of the effective work that has been done in checking the ravages of a disease which is still far too prevalent. Vaccination against typhoid is now successfully practiced, especially in the United States Army. This is a valuable preventive measure under existing conditions, but such methods of protection should be rendered unnecessary by a thorough enforcement of sanitary precautions, especially in the rural districts. If the same measures that in some sections have practically stamped out typhoid fever were universally employed, this disease would become a medical curiosity, like small-pox.

In the Report On National Vitality, typhoid fever is listed as preventable to the extent of 85%. This seems a reasonable estimate. Water, milk, and food must be protected from contamination by typhoid bacilli, and especially from that pestiferous germ-carrier, the house-fly. The house-fly breeds in filth, particularly manure-heaps. Ignorant and stubborn neglect is responsible for the existence of this menace. In many sections of the country the present methods of sewage disposal are little in advance of those of our remote cave-dwelling ancestors. Before indulging in a pitying contempt for savage nations, we should rid ourselves of the unspeakable habits which we have inherited from similar ancestors. The Health Officer in small towns and rural districts should be supported in his efforts by every loyal citizen. His advice should be sought and followed as a matter of simple fundamental decency and self-protection.

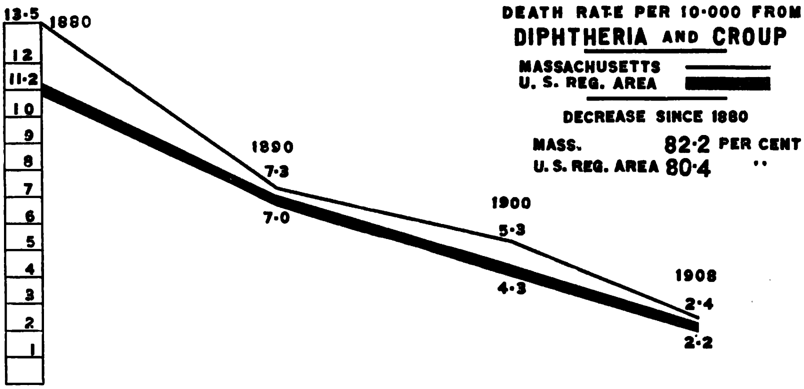


CHART No. 14

DIPHTHERIA

Chart No. 14 is an illuminating example of how science can control mortality. Those who look upon the death rate as a fixed quantity ignore such facts as a reduction in the mortality from diphtheria and croup of 80% in 28 years, the rate per 10,000 falling from 11.2 in 1880 to 2.2 in 1908. Much of this tremendous gain, chiefly in child life, is due to the curative effects of diphtheria antitoxin, which was first employed in 1895, but general preventive measures and the energetic work of local health authorities must also receive a due share of credit.* Antitoxin is not only a cure, but also a preventive, and has been used for that purpose with great effect, by the administration of small doses to those who have been exposed to infection. In this way diphtheria has been practically excluded from large hospitals where it was formerly a terror and a scourge with each recurring epidemic.

The lives saved from this malady, which formerly baffled the best medical skill, have contributed to the fall in the death rate among young lives which is exhibited in charts Nos. 2 and 5. But the death rate from diphtheria is still far in excess of what it should be. By continuous effort, and with the progress of science, it may be hoped that the loss of life from this disease will in time be reduced to a neglible quantity.

---

* Notably the recent success of the Health Department of Pennsylvania.

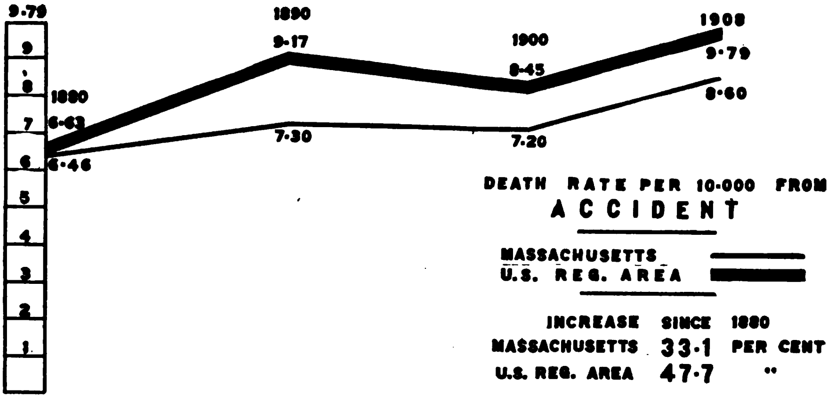


CHART No. 15

ACCIDENT

A rise in the death rate from accidental causes of 47.7% since 1880 in the United States Registration Area supports the oft-repeated charge that nowhere in the civilized world is life valued so cheaply as in this country.

Although numerous laws have been passed calling for the employment of safety devices and the protection of industrial employes, the death roll from preventable accidents still exceeds that of all other civilized countries.

While additional legislation is doubtless necessary, the public must be educated to place a higher value upon human life, before the mortality from violent and accidental causes can be materially reduced. The apathy with which mob violence is viewed reveals the need for such education. *The prevention of disorder* is just as necessary as the employment of safety devices.

Nothing in these pages should be construed as placing an exaggerated value on mere longevity. A due sense of proportion is necessary in all such efforts. Perhaps we can best make for *efficient longevity* by bearing in mind the principle that life is a trust fund, which should neither be hoarded with parsimonious and sterile solicitude, nor expended with lavish and futile extravagance.

While carrying out preventive measures, it is important not to overlook the new science of eugenics. By the breeding of better human stock, the necessity for protection from disease will become lessened, as a healthier, happier and more resistant race is gradually evolved.

SHOULD IT BE IGNORED?

The vital importance of the conditions and tendencies described by Dr. Fisk in the foregoing pages must be conceded.

Why should the American people continue to ignore their duty to the 1,500,000 of their countrymen who are constantly ill from preventable disease?

Is the heavy increase in the death toll from cancer of no public concern?

Is it of no public interest that over 40,000 preventable deaths from pneumonia occur every year?

Are the enormous number of lives lost from diseases of the heart, arteries and kidneys of no value to the nation?

Should we not try to get this loss down to where it was thirty years ago, or to at least stop the increase?

Are we to be content with our present progress in fighting contagious disease and permit the heavy annual sacrifice from this cause to continue?

Our people face commercial and political problems with tremendous earnestness and determination; why should they turn their backs upon this vital problem of human life-waste?

There is no organized campaign against preventable diseases, except those of the communicable class.

Infectious disease, although preventable, is not conquered. It is carrying off tens of thousands of our people every year.

The National Association for the Prevention of Tuberculosis reports that over eight millions of dollars were spent last year in the war against that disease. While the amount used in fighting this terrible scourge is almost trivial, compared with the magnitude of the task, yet we find the death rate from this cause in the registration area of the United

---

"WHY NOT LEAVE QUESTIONS OF PUBLIC HEALTH TO THE DOCTORS AND PHILANTHROPISTS? IN REPLY, WHY NOT LEAVE ALL EDUCATIONAL MATTERS TO TEACHERS AND PHILANTHROPISTS? WHAT IS THE NECESSITY FOR A PUBLIC SCHOOL SYSTEM? WHY NOT LEAVE QUESTIONS RELATING TO AGRICULTURE TO THE FARMER? IT WOULD BE MORE LOGICAL THAN TO LEAVE THE PHYSICIANS OF THE COUNTRY UNAIDED TO FIGHT AGAINST PREVENTABLE DISEASES."—**Dr. Geo. M. Sternberg, Surgeon-General U. S. A., Retired.**

States has decreased forty-eight per cent. since 1880. And still it is estimated that about 500,000 American people are now afflicted with tuberculosis, of whom about 130,000 die annually.

The death rate from typhoid fever, another communicable disease, the conquering of which is largely a question of sanitation, has been reduced 41% since 1880. And still there are about 20,000 people dying annually from this disease.

The diphtheria rate has been reduced 80% since 1880. A large portion of this decrease is directly due to the use of antitoxin, which was first introduced in 1895; but still about 20,000 lives are annually lost from this malady.

The lives annually lost from these three preventable causes equal the population of Columbus, Ohio.

And the annual death toll claimed by cancer, pneumonia, and diseases of the heart, arteries and kidneys equals the population of Cincinnati, Ohio.

What is being done to check this loss of national vitality?

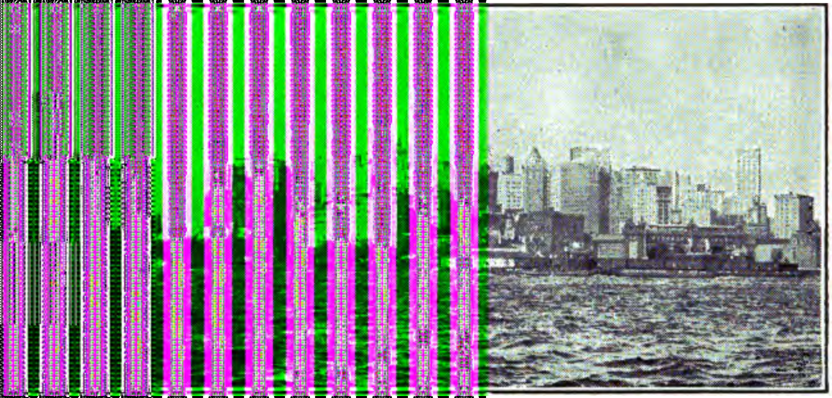
The sinews of war to carry on an organized campaign against avoidable disease must come from two sources—the public taxes and private contributions.

While the success of our public health officials, Federal, State and Municipal, in preventing misery and in saving human life has been unequalled in the history of nations, it is interesting to note how sparingly our law-makers have contributed to their support and to the prolongation of human life.

An idea may be gained of the very slight importance now placed upon the conservation of human life by noting the following proportion of total annual government expenditures allotted to Health Bureaus:

Greater New York,	1.7 per cent.;
148 American Cities,	1.8 per cent.;
U. S. Government,	1.3 per cent.

> "THE HIGHEST AIM OF SCIENTIFIC MEDICINE TODAY IS THE ERADICATION OF PREVENTABLE DISEASE, AND IN THE SOLUTION OF THIS PROBLEM ALL MEN WHO HAVE THE INTEREST OF THE HUMAN RACE AT HEART CAN AND DO UNITE, REGARDLESS OF MEDICAL SCHOOLS OR CREEDS."—**Dr. Geo. M. Kober, Professor of Hygiene, Medical Department, Georgetown University, Washington, D. C.**



RK CITY.

eater New York have an , and have accomplished de of their task and the

New York last year was city could afford to offer 3,134, or 1.7 per cent. of ear, the city lost 33,200 diseases.

,039,565 on the Fire De- 00,000.

ent they spent $2,523,134, preventable disease, using 00 as the productive value

he appropriation was lib- atively small and wholly rvation of public health in rs, owing to the efficiency he work of the unofficial n consumption since 1880 fever 32%; from diph- om diseases that were not

---

THREATEN THE PUBLIC HICH WE SEE. WE SPEAK FEVER OR CHOLERA. WE SE PLAGUES COMES ALONG EDS, OR THOUSANDS, PER- NCE TO FIGHT THAT EVIL E REAL UNDERMINING OF NE IN AN INSIDIOUS WAY. ETED OUT."—Dr. Harvey W. Washington, D. C.

E

disease, 73%; heart
nia, 24%; from spinal

ng of the younger lives
eral average death rate
riod.

ined from such a small
ned to the death rate,
on, the Health Depart-
d with a liberally en-
rge corps of examining
lequate number of in-
itation and the preven-
ipment of laboratories,
essary to a department
alth and lives of nearly

ORK.

E MONEY FOR THE PRO-
THAN FOR ITS CITIZENS."
ealth, State of New York.

with over eight million
on of disease in 1909,
he Health Department,
f the total expenditures

he protection of game,

AUSE WE ARE ACCUS-
STE OF LIFE AND ARE
T IS ONE OF THE DIS-
VIDENCE THAT WE GO
INESS, LITTLE THINK-
TIVE MEASURES THAT
ernor Charles E. Hughes.

[illegible] NAL ALLOWANCE.

[illegible] ngress has been as indif- [illegible] as the law-makers of our [illegible] lities.

[illegible] total expenditures author- [illegible] year, amounting to $1,- [illegible] 000,000, or 1.3% of the [illegible] e protection of the public [illegible]

[illegible] sed for pensions $161,000,- [illegible] tates Senator asserted on [illegible] ate that three-fourths of [illegible] hargeable to illness and [illegible] hat were preventable, and [illegible] as cost the American peo- [illegible] rs and much misery and [illegible] attention to the fact that [illegible] spending enormous sums, [illegible] ars of the past and in [illegible] rs of the future. But for [illegible] se now costing us infinite [illegible] ves only a trifling sum is [illegible]

[illegible] e and the appropriations [illegible] ealth Service are, its ef- [illegible] veness are of the very [illegible]

TE

ERENCE.

ving demonstrated its
fever and other con-
public opinion would
riating funds to gradu-
ess in preventing life-
tance that those mem-
t to this loss, or who
g it, should be aroused
ir constituents.

ession to secure a law
ealth activities under

life-waste was brought
f the country by a very
Senator Owen, of Okla-
ich of this sickness and
ntelligent application of
prevention, which has
years.

d, not to increase the
simply to improve its
ureaus under one head,
out of Congress. It is
fering humanity that it

nt for the good of man-
d opposition.

st benefactors have been
great Americans who
of our sovereignty were
n liberty.

t that measures for the
cape similar opposition;
on and progress in dis-
it.

EALTH IS THE FOUN-
REPOSES THE HAPPI-
PLE AND THE POWER
CARE OF THE PUBLIC
ST DUTY OF A STATES-
eld.

MAN.

farmer expert advice, in
disease among his hogs;
, an expert will be sent
has no bulletins, and no
himself or his wife and
ble diseases.

and his family against
for the farmer and his

orous efforts to protect
Asiatic cholera, both re-
to die to-morrow of
without the slightest

an animal of commerce.
would doubtless exceed

NSTITUTION ESPECIALLY
S; AND IF OUT OF THE
WE CAN ESTABLISH A
IT DOES NOT SEEM TO
LOGIC TO SAY THAT WE
MONEY IN A BUREAU OF
DEVELOP GOOD MEN AND

ANIMAL IS THE FIRST
ESS IN LIFE, AND TO BE
ANIMALS IS THE FIRST
IONAL PROSPERITY."—

OVERNMENT.

to prevent the needless
ly a proper function of
t a most imperative and

eral in spending public
merce, to the end that the
lth may be made as easy

d large sums to improve
bors; to reclaim our arid
ater power and mineral

nsistent to spend public
r agricultural industries.
st. Experts are employed
e farmer from the attacks
iberally spent to prevent
horses.
rly care over our dumb
ut for the conservation
small change.
rnment encourages scien-
e of human ills, that a
rms the same service for
vith this difference, that
ure are applied through
nt, with a Cabinet Officer
eople this effective means
cause of human ills and

t disease prevention is a
protecting us against the
countries.
d generous in relieving

[illegible] ngress heard the far cry [illegible] fferers and appropriated [illegible]

[illegible] t hesitation for relieving [illegible] befell the people of San [illegible] ved of its action. And [illegible] should agree with Dr. [illegible] fficer of the District of [illegible] Committee:

[illegible] PER FOR CONGRESS [illegible] OR THE RELIEF OF [illegible] RIGHT AND PROPER [illegible] OR THE PREVENTION [illegible]

[illegible] quired the great railways [illegible] fety appliances to prevent [illegible] t. But is a life lost by [illegible] ne to the family, to the [illegible] ost by Bright's Disease of [illegible] es a preventable malady?

[illegible] for a Seacoast Life Saving [illegible] wning of any more value [illegible] er preventable disease?

[illegible] ut Congress has failed to [illegible]

[illegible] LIVE TO SEE THE TIME [illegible] REASED EFFICIENCY IN [illegible] LTH SERVICE—FEDERAL, [illegible] ICIPAL—WILL SHOW IT- [illegible] ATLY REDUCED DEATH- [illegible] ERAL GOVERNMENT CAN [illegible] L IMPULSE TO THIS END [illegible] MODEL PUBLIC HEALTH [illegible] AKING OUR NATIONAL [illegible] EL, SANITARY CITY."— [illegible]

WHAT THE PUBLIC IS DOING.

The volunteer campaign against public indifference which has been waged by a number of medical men, by public-spirited citizens in official and unofficial life, and by organizations of scientific men, has aroused much interest and won the moral support of many agencies which have the power to carry the gospel of disease prevention directly to millions of people.

But no popular war has been inaugurated against preventable disease—excepting consumption, and the anti-tuberculosis organizations have accomplished wonders in their field.

We have many very useful and worthy societies for the prevention of vice and crime and cruelty to children and animals, and to prevent the waste of our forests, and the defacement of our scenery; but none for the prevention of suffering and death from ordinary, preventable maladies.

The conservation of health has received the moral support of the two great political parties, which have made cautious declarations in their platforms to this effect.

It has the moral support of the great federations of labor representing millions of working men, but that is all.

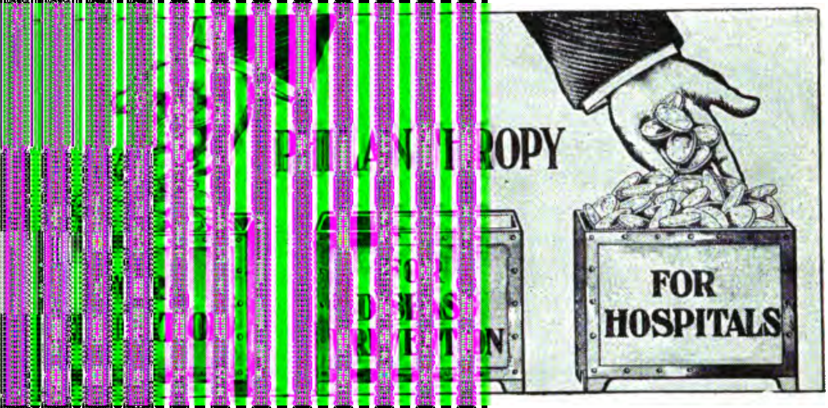
It has the moral support of the great life insurance companies and fraternal insurance orders which are interested in the longevity of twenty-two million policyholders, but only two or three life companies and two or three fraternal orders have so far undertaken to directly aid their policyholders in prolonging their lives.

Our great corporations and business enterprises employ a vast multitude of men and women. Nearly every city and town in the country has a Chamber of Commerce, or other organization, to promote the commercial interests of the community. In fact we have innumerable popular societies, associations and fraternal orders, and religious bodies, to promote our material, social and moral welfare.

These are powerful agencies for spreading knowledge of sanitation, hygiene and disease prevention, and they doubtless all are in favor of a movement for this purpose. In fact, every well meaning citizen must believe in a movement to prevent avoidable suffering and death.

But merely hoping for a lower death rate will not reduce it.

Something should be done to set these agencies at work. It is time the agitation upon this subject bore more substantial fruit than moral support.



[illegible] PY.

[illegible] tions, our philanthropists [illegible] arry directly to the people [illegible] n.

[illegible] us sums in the aggregate [illegible] —a most worthy and fruit- [illegible] re money were contributed [illegible] ess need for hospitals.

[illegible] to the needs of education, [illegible] ed. But is not education [illegible] te contributions?

[illegible] of schools, but the nation [illegible] ste—the loss in productive [illegible] estroyed is estimated to be [illegible] ually.*

[illegible] th illiteracy, and here is [illegible] e disease.

[illegible] which is entitled to "First [illegible]

[illegible] o the other he says:

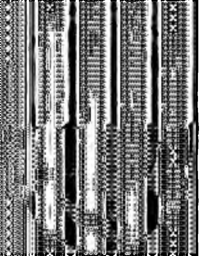
[illegible] has attacked you. I will [illegible] ed a hospital for this very

---

[illegible] LOST AT ONLY $1,700, AND [illegible] R THE YEAR AT ONLY $700, [illegible] AINED FROM PREVENTING [illegible] IN DOLLARS EXCEEDS ONE [illegible]"—Prof. Irving Fisher, Yale.

E

ER



great wealth, Mr. John
to be the most im-
need for a permanent
d with the necessity of
people.

ty, a hospital has been
study of cancer and
to the end that their
prevention and cure

assist in eliminating
which is causing much
districts of the South,
and effectively applied

nize the control of his
be used for all time in
hy purposes benefiting

a National Charter de-
e. One objection was
ed to the detriment of

neral principles to any-
h. There are doubtless
amassing of great for-
c good. But it seems
to the accumulation of
s taken from the people
to them through a per-
aced under the super-

cident, finds himself in
h comes along and pre-
ones comes along and
se he fears Smith may
ps hang somebody with

s.

A FOUNDATION FUND FOR DISEASE PREVENTION.

Our public Health Bureaus—Municipal, State and National—should be gradually enlarged and the scope of their activities extended to a point consistent with the magnitude and importance of the work in hand.

A corps of experts and lecturers on sanitation and the science of disease prevention should be maintained.

Health Bulletins should be issued and distributed and an official manual on sanitation and disease prevention should be placed within reach of every home and of our schools, where our children should be taught, within proper limitations, the nature, at least, of the more dangerous maladies, and how to guard against them.

The time is sure to come when the work of our public health departments will be enlarged, but in such matters our law-makers advance slowly, and only in response to the pressure of public opinion. Efforts are being made to educate and stimulate the public mind upon this question, but this, too, is a slow and expensive process.

For early relief upon an adequate scale we must depend upon the generosity and public spirit of those whose wealth will permit them to contribute to such a cause. The need of the hour is the foundation by our philanthropists of a disease prevention fund.

With such a fund a central institution, with local health bureaus and dispensaries, could be established for the study of preventive medicine, and the promotion of the public health generally. Its work should be confined solely to prevention, leaving treatment and cures to the physicians and hospitals. However the various cults and schools of medicine may contend for the supremacy of their theories and methods, the great work of reducing *the necessity for* treatment and cure should have the support of every right thinking man. A dollar for prevention is worth a thousand for cure.

Through the channels suggested the educational campaign could be conducted, and free diagnosis and examination could be given to those who desired them, for the purpose of detecting disease in time to cure or arrest it.

"PREVENTIVE MEDICINE IS THE WATCHWORD OF THE HOUR, AND ENLISTMENT IN THE CAUSE CAN COME ONLY THROUGH EDUCATION."—Dr. M. J. Rosenau, Department of Preventive Medicine and Hygiene, Harvard College.